



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/818,124	02/21/2013	Steven A. Sell	22070-USPCT	9519

66061 7590 02/01/2017  
WESTROCK COMPANY  
ATTN: IP LAW GROUP - PATENTS  
501 South 5th Street, 3rd Floor  
Richmond, VA 23219-0501

EXAMINER
----------

CHEYNEY, CHARLES

ART UNIT	PAPER NUMBER
----------	--------------

3754

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

02/01/2017

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketadministrator@westrock.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* STEVEN A. SELL

---

Appeal 2015-003393  
Application 13/818,124<sup>1</sup>  
Technology Center 3700

---

Before JOHN C. KERINS, EDWARD A. BROWN, and  
FREDERICK C. LANEY, *Administrative Patent Judges*.

LANEY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Steven A. Sell (Appellant) appeals under 35 U.S.C. § 134(a) from the Examiner's final decision rejecting claims 1–11 under 35 U.S.C. § 103(a) as unpatentable over Strand (US 2009/0283609 A1, pub. Nov. 19, 2009) and Landsman (US 3,765,573, iss. Oct. 16, 1973), as well as, claims 12–14 under 35 U.S.C. § 103(a) as unpatentable over Mascia (US 4,187,963, iss. Feb. 12, 1980) and Strand. We have jurisdiction over this appeal under 35 U.S.C. § 6(b).

We REVERSE.

---

<sup>1</sup> According to Appellant, the real party in interest is MeadWestvaco Calmar, Incorporated. Appeal Br. 3 (filed August 18, 2014).

## INVENTION

Appellant's invention "relates to aerosol sprayer devices and more particularly to simplified aerosol actuators." Spec. ¶ 2.

Claims 1 and 12, reproduced below, are independent and illustrative of the claimed invention.

1. An aerosol actuator, comprising:
  - a base, comprising *at least one valve guide sloping from an opening at a bottom of the base to a narrow hole*; and
  - a trigger, comprising:
    - a cap portion;
    - a trigger portion; and
    - a manifold integrally formed with the trigger portion and having an end seated in the narrow hole of the valve guide.
  
12. An aerosol actuator, comprising:
  - a base, comprising:
    - at least one container connection adjacent a lower portion of the base;
    - a valve guide positioned above the at least one container connection, wherein *the valve guide comprises a wall sloping from an opening near a bottom of the base to a narrow hole further away from the bottom of the base*; and
    - at least one snap fitment adjacent an upper portion of the base;
  - a trigger attached to the base, comprising:
    - a cap portion;
    - at least one snap attachment extending downward from the cap portion and snap-fit to the at least one snap fitment of the base;
    - a trigger portion extending from the cap portion;
    - a living hinge in the cap portion and connected to the trigger portion; and

a manifold, wherein an end of the manifold is seated in the narrow hole of the valve guide.

Appeal Br. (Claims App.) (emphasis added).

## ANALYSIS

### Claims 1–11

Rejecting claims 1–11, the Examiner finds “Strand discloses the claimed invention except for the valve guide sloping from the opening at the base bottom to a narrow hole,” which independent claims 1 and 7 require. Final Act. 3. Strand teaches a one-piece aerosol spray cap, which includes an integrally formed finger trigger portion and a base for engaging a mounting cup that holds the valve actuator. Strand ¶¶ 9, 36, 37, 40, Figs. 1–3. The base 5 also includes a V-shaped trigger support 22 *above the collar* 8, which has a solid ramp on the front portion 23 that assists in directing the down tube 7 into the central opening, so that the down tube 7 can engage and communicate with the valve stem V. *Id.* ¶¶ 9, 37, 39, Figs. 1–3.

Citing elements 31’ (as showing a valve guide), 33’ (as showing a slope), 32’ (as showing an opening), and 34’ (as showing a narrow hole) from Landsman, the Examiner finds the prior art discloses the “valve guide sloping from the opening at the base bottom to a narrow hole” claim element missing in Strand. Final Act. 3 (citing Landsman, 4:18–20, Fig. 4). The Examiner concludes,

[i]t would have been obvious to one having ordinary skill in the art at the time the invention was made to have the valve guide slope to a narrow hole as taught by Landsman, since Landsman states in column 4, lines 19–20 that such a modification aligns the valve with the narrow hole allowing for unimpeded channel for dispensing.

*Id.*; *see also* Ans. 2. Taking exception to the Examiner’s rationale for combining Strand and Landsman, Appellant argues it lacks a rational underpinning. Appeal Br. 9–11.

Appellant asserts element 31’, which Landsman calls a “protuberance” (col. 2, l. 50), is *an actuator* rather than a “valve guide.” Appeal Br. 9. Landsman is directed to an “actuating cap,” which is designed “to protect the nozzle from accidental discharge in one position of the cap and which with a simple operation may be moved to a second position and affixed to the container to actuate such nozzle and retain the latter in actuated condition.” Landsman, Title, 1:38–42. Appellant points out that Landsman describes element 31 as having an “internal conical cavity 32, the apex 33 of which has a discharge opening 34 of relatively small diameter . . . [the] inclined inner surface of the conical wall 35 of the protuberance 31 forms a cam surface to actuate the nozzle 13.” Appeal Br. 9 (quoting Landsman, 2:49–61). Landsman further states, “the nozzle 13’ will abut against the inner wall 35’ of the cavity 32’ . . . [so that] with further downward movement of the cap . . . , the nozzle 13’ will be displaced inwardly and actuated for release of the contents of the container through the discharge opening 34’.” Landsman, 4:15–26.

Even if the claimed “valve guide,” given its broadest reasonable interpretation, may encompass the “protuberance” of Landsman because it provides direction to the nozzle, Appellant appropriately points out that the purpose for the protuberance in Landsman is to apply a directional force to the nozzle to *actuate* the associated valve. In addition, the protuberance of Landsman is located on a transverse wall of the cap, *which is distanced from both the top and bottom of the cap* to create chambers A and B, which are

designed to collect undesired contents released from the container.

Landsman, at 3:28–39, Fig. 2. Therefore, the “valve guide” of Landsman does not slope from the opening *at the base bottom to a narrow hole*, as independent claims 1 and 7 require, nor does Landsman suggest using the protuberance to facilitate a valve/manifold connection, which is the purpose the Specification, at paragraphs 71–73, 77, and 78, ascribes to the claimed valve guide.

“[Federal Circuit] precedent dictates that the [Examiner] must make a finding of a motivation to combine when it is disputed.” *In re Nuvasive, Inc.*, 842 F.3d 1376, 1382 (Fed. Cir. 2016). “Although identifying a motivation to combine ‘need not become [a] rigid and mandatory formula[.]’ *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007), the [Examiner] must articulate a *reason why* a PHOSITA would combine the prior art references.” *Id.* The Examiner “must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.” *Id.* (quoting *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)).

In this case, the Examiner was obligated to articulate a reason why a skilled artisan would have modified Strand to have a “valve guide sloping from the opening at the base bottom to a narrow hole.” A skilled artisan would have made that modification, according to the Examiner, because Landsman teaches a structure that aligns the valve with a narrow hole and allows for an unimpeded channel for dispensing. Final Act. 3; Ans. 2. Missing from the Examiner’s obviousness determination, however, is any

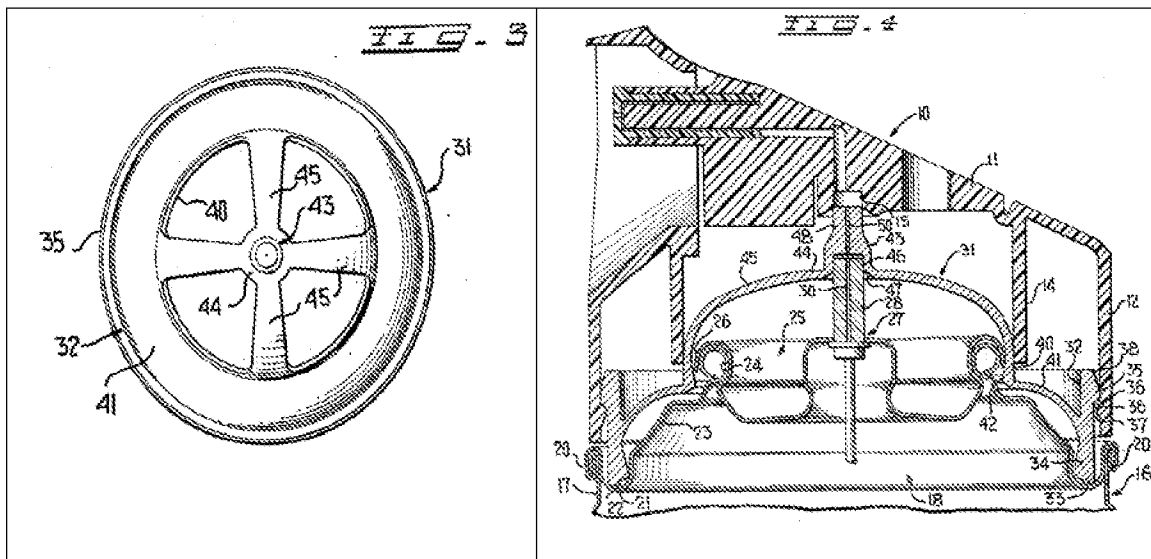
explanation of why knowledge of Landsman's dispensing structure would have led a skilled artisan to change the alignment structure Strand discloses.

In particular, the Examiner fails to set forth a rational connection between Landsman's actuating structure that aligns a valve to facilitate dispersion and why a skilled artisan would modify, in Strand, the V-shaped trigger support 22 *above the collar* 8, which has a solid ramp on the front portion 23 that assists in directing the down tube 7 into the central opening so that the down tube 7 can engage and communicate with the valve stem V, to have a base with a valve guide that slopes from an opening near a bottom of the base to a narrow hole further away from the bottom of the base. This is particularly problematic in this case because Landsman does not suggest a structure that facilitates a valve/manifold connection or a structure that has a wall sloping from near the *bottom* of the base. Nor does Strand disclose or suggest a base with a valve guide that slopes from near the *bottom* of the base to an opening with a manifold seated therein. Therefore, we do not sustain the Examiner's obviousness determination of claim 1 and 7 because it lacks a rational underpinning and, for the same reasons, we also do not sustain the obviousness determination of dependent claims 2–6 and 8–11.

#### Claims 12–14

The Examiner determines claims 12–14 are an obvious combination of elements Mascia and Strand disclose. Final Act. 3–4. Similar to claims 1 and 7 discussed above, independent claim 12 requires a base with a “valve guide compris[ing] a wall sloping from an opening near a bottom of the base to a narrow hole further away from the bottom of the base.” Appeal Br. 18 (Claims App.). Having already found Strand does not disclose a valve guide sloping from the opening at the base bottom to a narrow hole (Final Act. 3),

the Examiner relies on Mascia to disclose the valve guide claim 12 recites. Final Act. 4. Mascia relates to an adapter ring for a dispensing overcap that “includes an axially movable valve stem adapter which provides a fluid connection between the dispensing overcap and the valve stem of the aerosol can.” Mascia, Abstract. “The valve stem adapter **43** includes a lower ring portion **44** which is connected to the inner ring **40** by a plurality of circumferentially spaced arms **45**,” which are tapered in width from their lower ends to the ring **44**, as shown in Figures 3 and 4 reproduced below. *Id.* at 2:64–3:2, Figs. 3, 4.



The above figures are “an enlarged plan view of the adapter ring” (Figure 3) and “an enlarged fragmentary vertical sectional view” (Figure 4) of the Mascia device. *Id.* at 1:47–49. Mascia teaches that, when a downwardly directed pressure is applied to the overcap 10, “the arms **45** flex and permit the valve stem adapter **43** to move downwardly, thereby causing downward movement of the valve stem **48** open the valve with which it is associated.” *Id.* at 3:22–27. The Examiner finds elements 44 and 45 of Mascia’s adapter ring disclose the claimed valve guide. Final Act. 4.



Appellant persuasively argues “the alleged basis for the rejection of claim 12 is flawed in that the components alleged to act as a ‘valve guide’ do not do so.” Appeal Br. 13. Appellant correctly notes that Mascia teaches that the valve stem adapter 43 includes a valve guide by stating, “[t]he valve stem adapter 43 has a lower socket 46 defined by a bore which includes a conical lower portion 47 so that the upper end of the valve stem 43 [sic] may be readily telescoped into the socket 46 and seated therein in sealed engagement.” *Id.* (quoting Mascia, 3:3–7). Nevertheless, that valve guide differs from the claimed one because it has a wall that slopes *from an opening near the top of the valve stem adapter* rather than having “a wall sloping from an opening near a bottom of the base,” as claim 12 requires.

Still, even though Mascia specifically discusses a structure for guiding the valve stem, Mascia does not suggest or indicate elements 45 and 44, which the Examiner finds is a valve guide, serve any function toward accomplishing that purpose. To the contrary, Mascia describes the structural design of elements 45 and 44 as providing “flex” to enable overcap 10 operate in a conventional manner when a downward force is applied to actuate the valve. Mascia, 2:64–3:2, 3:22–27, Figs. 3, 4. Although the Examiner finds, “legs (45) of Mascia provide for separate guides as they clearly direct anything in contact with them towards fluid communication with the manifold with their convex nature toward said manifold,” (Ans. 4), a preponderance of the evidence fails to support this finding. Therefore, because Examiner has not established Strand or Mascia disclose the claimed valve guide that has “a wall sloping from an opening near a bottom of the base to a narrow hole further away from the bottom of the base,” we do not sustain the Examiner’s rejection of claims 12–14.

Appeal 2015-003393  
Application 13/818,124

DECISION

The Examiner's rejections of claims 1–14 are reversed.

REVERSED